

Metabolic Risk Factors and Associated Morbidities among Adult Urban People in Pyin Oo Lwin Township

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Abstract

This community based cross-sectional descriptive study was conducted during 2015. The purpose of this study is to identify metabolic risk factors and associated morbidities among adult urban people in Pyin Oo Lwin Township. A total of 355 people, 94 men (26.5%) and 261 women (73.5%) were enrolled. Age distribution was from 18 to 85 years with mean of 49.98 (15.22) years. Metabolic risk factors were identified according to National Cholesterol Education Programme Adult Treatment Panel III (NCEP ATP III) guideline. In this study, central obesity was the highest component 145 subjects (40.8%) followed by elevated triglycerides 129 (36, 3%), elevated blood pressure 104 (29.3%), low HDL-cholesterols 85 (23.9%), and elevated fasting glucose in only 48 individuals (13.5%). The total prevalence of metabolic syndrome was 35.2% with 26.6% in men and 38.3% in women respectively. There were statistically significant associations above all five metabolic risk factors with metabolic syndrome (p value <0.001). Regarding its associated morbidities, normal in total bilirubin level (96.1%) and ALP level (93.8%) otherwise ALT and AST levels were abnormal, 18.0% and 28.2% respectively in liver function test. Serum urea, creatinine, uric acid and calcium levels were normal in 96.1%, 89.6%, 67.3% and 33.5% respectively. ECG examinations showed normal 296 cases (83.4%) and abnormal in 59 cases (16.6%). In Bone Mass Density by T- score using qualitative ultrasound examination, the results showed normal 168 cases (47.3%), osteopenia 174 cases (49.0%) and osteoporosis 13 cases (3.7%) respectively. In conclusion, this study recognizes the high prevalence rate of metabolic syndrome and can be depicted about the metabolic risks as the baseline data for implementation of further activities to reduce the incidence of non-communicable diseases.

Key words: Metabolic Risk Factors, Urban people, NCEP ATP III